

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions in the application.

LISTING OF CLAIMS:

1. (previously presented) An apparatus for removing body fluids from a body cavity by suction, comprising:

a catheter having a drainage lumen and an auxiliary lumen adapted for placement adjacent a wound in the body cavity to be drained of body fluid, the drainage lumen having a proximal end being in fluid communication with a proximal end of the auxiliary lumen;

a container for connection in fluid communication with the drainage lumen and for receiving body drainage fluid from the body cavity;

a source of suction for effecting negative pressure in the drainage lumen; a valve for opening the auxiliary lumen in order to supply air or gas to the body cavity;

wherein, for removing clots or plugs in the drainage lumen, the apparatus further comprises a first pressure sensor for measuring the pressure in the auxiliary lumen and a controller to increase the pressure difference between a pressure in the drainage lumen and a pressure in the atmosphere when the auxiliary lumen is open only when the pressure measured in the auxiliary lumen corresponds at least to atmospheric pressure.

2. (previously presented) The apparatus of claim 1 wherein the source of suction is a suction pump and the controller controls the suction power of the suction pump.

3. (previously presented) The apparatus of claim 1, wherein the first pressure sensor is in communication with the controller.

4. (previously presented) The apparatus of claim 1 wherein the controller is in communication with the valve for opening the auxiliary lumen.
5. (previously presented) The apparatus of claim 1 wherein the pressure difference can be increased to achieve a negative pressure level in the drainage lumen being at least half of the negative pressure level during drainage.
6. (previously presented) The apparatus of claims 1 further comprising a means for measuring the pressure in at least one of the group of the container and the drainage lumen.
7. (previously presented) The apparatus of claim 6 wherein this means is a second pressure sensor.
8. (previously presented) The apparatus of claim 7, wherein the controller is in communication with the second pressure sensor.
9. (previously presented) The apparatus of claims 1 wherein the controller is increasing the pressure continuously.
10. (previously presented) The apparatus of claims 1, wherein the controller is increasing the pressure abruptly.

11. (currently amended) A method for operating an apparatus for removing body fluids from a body cavity by suction, the apparatus comprising:

a catheter having a drainage lumen and an auxiliary lumen adapted for placement adjacent a wound in the body cavity to be drained of body fluid, the drainage lumen having a proximal end being in fluid communication with a proximal end of the auxiliary lumen;

a container for connection in fluid communication with the drainage lumen and for receiving body drainage fluid from the body cavity;

a source of suction for effecting negative pressure in the drainage lumen and a valve for opening the auxiliary lumen in order to supply air or gas to the body cavity;

the method comprising the steps of

measuring the pressure in the auxiliary lumen[.];

opening the auxiliary lumen; and

increasing the pressure difference between a pressure in the drainage lumen and a pressure in the atmosphere only when the pressure measured in the auxiliary lumen corresponds at least to atmospheric pressure, wherein the pressure difference is increased by increasing the power of the source of suction.

12. (canceled)

13. (canceled)

14. (previously presented) The method of claim 11 wherein the auxiliary lumen is opened by opening a first valve.

15. (previously presented) The method of claim 14 wherein the source of suction is controlled by a controller and wherein the controller is in communication with at least one of the group of the valve and a first pressure sensor measuring the pressure in the auxiliary lumen.

16. (currently amended) A method for removing body fluids from a body cavity by suction, the method comprising the steps of:

providing a catheter having a drainage lumen and an auxiliary lumen adapted for placement adjacent a wound in the body cavity to be drained of body fluid, the drainage lumen having a proximal end being in fluid communication with a proximal end of the auxiliary lumen;

providing a container for connection in fluid communication with the drainage lumen and for receiving body drainage fluid from the body cavity;

providing a source of suction for effecting negative pressure in the drainage lumen and

providing a valve for opening the auxiliary lumen in order to supply air or gas to the body cavity

the method further comprising the steps of

measuring the pressure in the auxiliary lumen[.];

opening the auxiliary lumen; and

increasing the pressure difference between a pressure in the drainage lumen and a pressure in the atmosphere only when the pressure measured in the auxiliary lumen corresponds at least to atmospheric pressure, wherein the pressure difference is increased by increasing the power of the source of suction.